



XDVD3101

INSTALLATION/OWNER'S MANUAL

DVD Multimedia Receiver with 7" Touch Screen Display



Safety Notes:

The DVD video display of the in-dash unit will not operate while the vehicle is moving. This is a safety feature to prevent driver distraction. In-dash DVD video functions will only operate when vehicle is in Park and the parking brake is engaged. It is illegal in most states for the driver to view video while the vehicle is in motion.

Copyright Notes

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"Made for iPod" and "Made for iPhone" mean that an electronic accessory has been designed to connect specifically to iPod or iPhone, respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPod or iPhone may affect wireless performance.

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⚠ WARNING ⚠

Upon installation of this Monitor/DVD player ("unit") into a vehicle, the driver of the vehicle must not operate this unit by watching videos or playing video games while driving. Failure to follow this instruction could lead to driver distraction which could result in serious injury or death to the vehicle's occupants or persons outside the vehicle and/or property damage.

Several states prohibit the installation of monitors/DVD players if the screen is visible from the driver's seat. If you reside in a jurisdiction which has enacted such a law, this unit must not be installed so that the screen is visible from the driver's seat. When installing this unit in the front console/dashboard, the unit must be positioned so that it is facing the front passenger seat only. Failure to follow this instruction could lead to driver distraction which could result in serious injury or death to the vehicle's occupants or persons outside the vehicle and/or property damage.

This unit is designed so that it may be operated only when the vehicle is in "Park" and the parking brake is fully engaged. To this end, this unit includes a parking brake lock-out feature which prohibits the unit from operating if the vehicle is not in "Park" and/or the parking brake is not fully engaged. When installing this unit, the installer must connect the parking brake detect wire ("Yellow-Blue Lead") to the parking brake mechanism in order to make the parking brake lock-out feature operable. DO NOT simply ground the parking brake detect wire to a metal portion of the vehicle. Failure to properly install the parking brake lock-out feature could lead to driver distraction which could result in serious injury or death to the driver's occupants or persons outside the vehicle and/or property damage.

Once the parking brake lock-out feature is installed, the owner/user must not attempt to disrupt/neutralize the parking brake lock-out feature by (a) partially engaging the parking brake and/or (b) purchasing/using any device or unit designed to send necessary brake signals to the unit. Failure to follow these instructions could lead to driver distraction which could result in serious injury or death to the driver's occupants or persons outside the vehicle and/or property damage.

When operating this unit, keep the unit's volume level low enough so that the vehicle's occupants can hear traffic-related sounds such as police and emergency vehicles. Failure to follow this instruction could lead to driver distraction which could result in serious injury or death to the vehicle's occupants or persons outside the vehicle and/or property damage.

Safety Information

Please read all instructions carefully before attempting to install or operate.

Due to its technical nature, it is highly recommended that your DUAL XDVD3101 is installed by a professional installer or an authorized dealer. This product is only for use in vehicles with 12VDC negative ground only.

To prevent damage or injury:

- Make sure to ground the unit securely to the vehicle chassis ground.
- Do not remove the top or bottom covers of the unit.
- Do not install the unit in a spot exposed to direct sunlight or excessive heat or the possibility of water splashing.
- Do not subject the unit to excessive shock.
- When replacing a fuse, only use a new one with the prescribed rating. Using a fuse with the wrong rating may cause the unit to malfunction.
- To prevent short circuits when replacing a fuse, disconnect the wiring harness first.
- Use only the provided hardware and wire harness.
- You cannot view video while the vehicle is moving. Find a safe place to park and engage the parking brake.
- If you experience problems during installation, consult your nearest DUAL dealer.
- If the unit malfunctions, reset the unit as described on page 10 first. If the problem still persists, consult your nearest DUAL dealer or call tech assistance @ 1-866-382-5476.
- To clean the monitor, wipe only with a dry silicone cloth or soft cloth. Do not use a stiff cloth, or volatile solvents such as paint thinner and alcohol. They can scratch the surface of the panel and/or remove the printing.
- When the temperature of the unit falls (as in winter), the liquid crystal inside the screen will become darker than usual. Normal brightness will return after using the monitor for a while.
- When extending the ignition, battery or ground cables, make sure to use automotive-grade cables or other cables with an area of 0.75mm (AWG 18) or more to prevent voltage drops.
- Do not touch the liquid crystal fluid if the LCD is damaged or broken. The liquid crystal fluid may be hazardous to your health or fatal. If the liquid crystal fluid from the LCD contacts your body or clothing, wash it off with soap immediately.

FCC Compliance

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

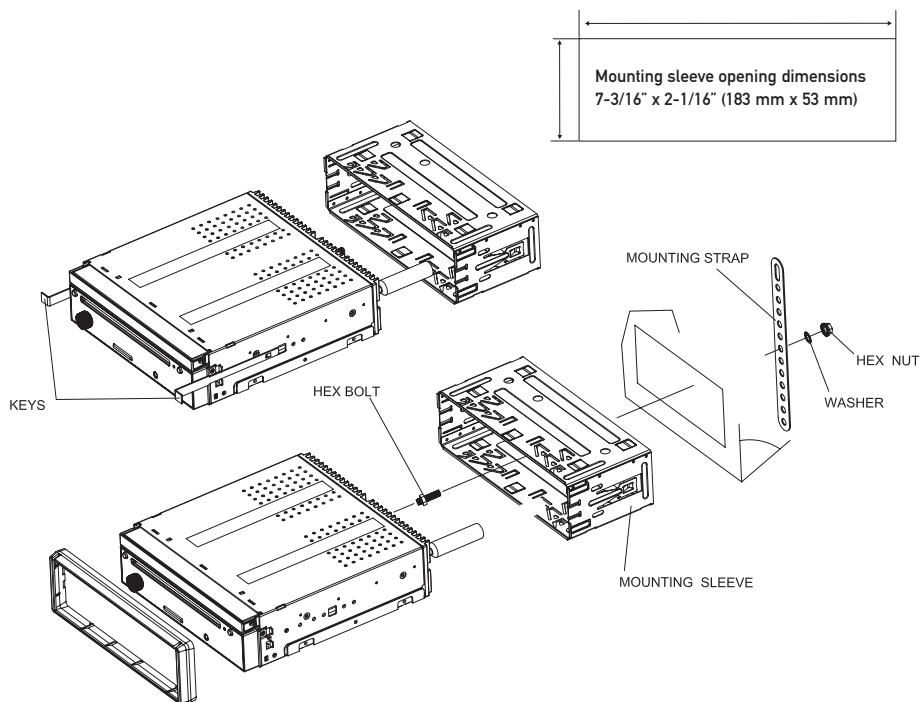
Preparation

Before You Start

- Disconnect negative battery terminal. Consult a qualified technician for instructions.
- Avoid installing the unit where it would be subject to high temperatures, such as from direct sunlight, or where it would be subject to dust, dirt or excessive vibration.

Getting Started

- Insert the supplied keys into the slots as shown, and slide the unit out of the mounting sleeve.
- Install mounting sleeve into opening, bending tabs to secure.
- Connect wiring harness as shown on page 6. Consult a qualified technician if you are unsure.
- Certain vehicles may require an installation kit and/or wiring harness adapter (sold separately).
- Reconnect negative battery terminal, and test for correct operation.
- Snap trim ring into place (if required).
- Slide unit into mounting sleeve to secure.

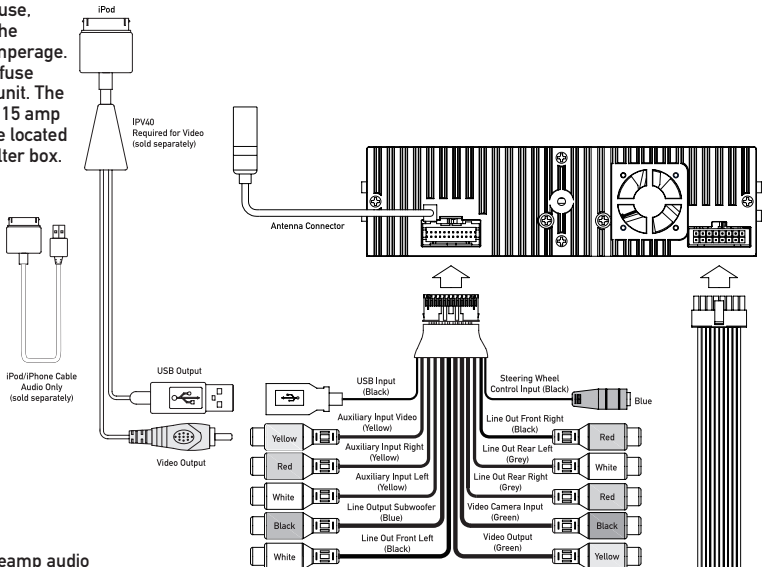


TYPICAL FRONT-LOAD DIN MOUNTING METHOD

Wiring Diagram - Inputs/Outputs

Note:

When replacing a fuse, make sure to use the correct type and amperage. Using an incorrect fuse could damage the unit. The XDVD3101 uses (1) 15 amp ATM mini style fuse located inside the in-line filter box.



Wiring Notes:

Subwoofer output

The Subwoofer preamp audio output (blue jacket with black RCA) is active in all audio modes.

Rear camera input

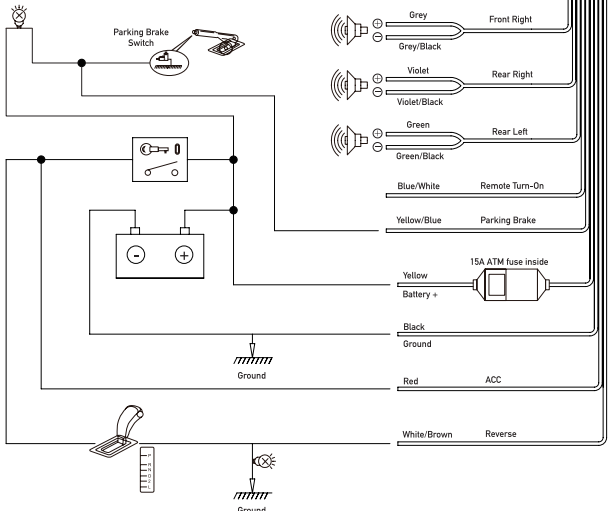
A rear view camera (not included) can be used with the Camera input. Refer to page 35 for details.

Steering wheel interface input

The steering wheel interface input (black jacket with blue 3.5mm) allows connection to the Pacific Accessory Corporation SWI-PS interface module (sold separately). Visit www.pac-audio.com for details.

Connecting an iPod/iPhone device

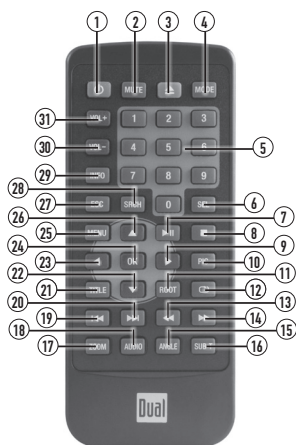
To play music from an iPod/iPhone device using the direct USB interface, connect the USB cable (included with your iPod/iPhone device) to the XDVD3101's USB port. Once connected, playback will begin automatically. To view video and photos from an iPod/iPhone device, the Dual IPV40 cable (sold separately) is required.



Control Locations



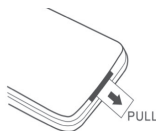
- | | |
|-------------------------|---------------------|
| ① Eject | ⑦ Tune / Track Down |
| ② Display | ⑧ Play / Pause |
| ③ Power / Volume / Mute | ⑨ Tune / Track Up |
| ④ Mode | ⑩ Open / Angle |
| ⑤ SD Card Slot | ⑪ Reset |
| ⑥ Auxiliary A/V Input | |



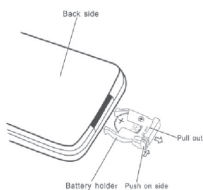
- | | | |
|----------------|---------------------------------|--------------------------------|
| ① Power | ⑩ Picture | ⑱ Chapter/Track/Seek Tune Down |
| ② Mute | ⑪ Root Menu | ⑲ Chapter/Track/Seek Tune Down |
| ③ Eject | ⑫ Repeat | ⑳ Title Menu |
| ④ Mode | ⑬ Fast Reverse/Manual Tune Down | ㉑ Arrow Down |
| ⑤ Number Keys | ⑭ Fast Reverse/Manual Tune Up | ㉒ Arrow Left |
| ⑥ Select | ⑮ Angle | ㉓ OK |
| ⑦ Play / Pause | | ㉔ Menu |
| ⑧ Stop | | ㉕ Arrow Up |
| ⑨ Arrow Right | | ㉖ Escape |
| | | ㉗ Search |
| | | ㉘ Info |
| | | ㉙ Volume Down |
| | | ㉚ Volume Up |

Remote Control Preparation

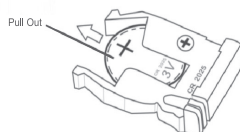
Remove battery insulation tape .



To insert or replace the battery, remove the battery holder.



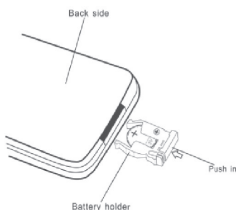
Remove the battery from the battery holder.



Install the new battery.
Make sure to keep the (+) side up.



Insert the battery holder .



Notes:

- The remote control uses one 3 volt Lithium CR2025 battery. Remove the battery if the remote will not be used for a month or longer.
- Remove and dispose of battery properly.
- Do not store battery with metallic objects or materials.



General Operation

Volume/Power On/Off

Momentarily press the **volume knob** to turn the unit on. Hold for 2 seconds to turn the unit off. Turn the **volume knob** to adjust the volume level lower or higher (0-40).


Opening/Angling the Screen

Press **OPEN/ANGLE** to open or close the display screen. When the screen is open, press and hold **OPEN/ANGLE** to change the screen angle.

Volume Memory

If the volume level is <21 when the unit is turned off, it will be retained in memory the next time the unit is turned on. If the volume level is >20 when the unit is turned off, the volume level will automatically default to 20 the next time the unit is turned on.

Mute

Momentarily press the **volume knob (MUTE)** to silence the audio:  will appear on the OSD (On Screen Display). Momentarily press the **volume knob (MUTE)** again to cancel. Turning the **volume knob** while the volume is muted will also cancel the mute function.

Mode

Press **MODE** to step through all available input modes: Tuner, Disc (which includes DVD and CD playback), SD, USB, operation of iPod, AV1, AV2 and Camera. Modes of operation are indicated on the OSD On Screen Display. Optional iPod device, USB flash drive and SD card must be connected/inserted to appear in the mode selection string.

When the screen is open, icons for non-selected modes are displayed across the top center region of the display. Directly access a different mode by touching the corresponding icon. Modes of operation can also be accessed from the Main Menu screen (see below).

3.5mm A/V Input

Connect external audio/video devices to this 3.5mm auxiliary A/V input.

Menu


Press **MENU** to view/select any operational mode (Tuner, Disc, USB, iPod, SD, AV1, AV2 or Camera), to enter the Setup menu or to put the unit in Standby mode.

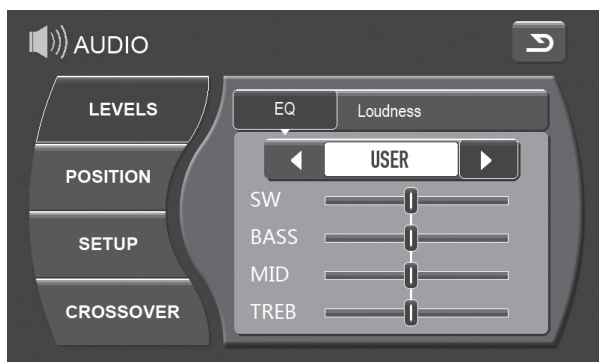
The Main Menu screen can also be accessed from all other modes by pressing the key area in the top left corner of the touchscreen.



General Operation

Reset To resolve abnormal operation or if the unit is inoperable, use the tip of a pen to press the **RESET** button (located on the front panel to the left of the **OPEN** button). The unit will reset the main processor to the default settings.

Audio Setup From any operational mode (except when viewing video), press the  icon in the bottom left corner of the screen to access the Audio menu.



Levels

- **EQ** - Press ◀ or ▶ to select between the preset equalization curves (User, Flat, Jazz, Pop, Rock, Soft, Vocal, Classic, Dance, Movie and Hip-Hop), or manually adjust the subwoofer (SW), bass (BASS), midrange (MID) or treble (TREB) levels by manually dragging the slider bar right or left.
- **Loudness** - Press Off or On to deactivate or activate the Loudness feature.

Position


- **Balance** - Drag the slider bar to adjust Balance Left or Right.
- **Fader** - Drag the slider bar to adjust Fader Front or Rear.

Setup

- **Bass** - Select a Bass setting: 60Hz, 80Hz, 100Hz, or 200Hz.
- **Midrange** - Select a Midrange setting: 500Hz, 1KHz, 1.5KHz or 2.5KHz.
- **Treble** - Select a Treble setting: 10KHz, 12.5KHz, 15KHz or 17.5KHz.



Crossover

- Select setting for the Subwoofer Low-Pass Filter: 80Hz, 120Hz or 160Hz.

Exit Audio Setup After audio adjustment is complete, press  to return to the previous screen.

General Operation

Setup Menu

From the Main Menu screen, press **Setup** to enter the Setup menu. The first four setup options will be displayed on the screen. Press  or  to scroll down or back up through the additional options:



Screen

- **Brightness** - Press + or - to increase or decrease screen brightness.
- **Contrast** - Press + or - to increase or decrease contrast levels.
- **Color** - Press + or - to increase or decrease color levels.





DVD

- **Mode** - Select one of the following modes for DVD playback: Full, Original, Height Fit or Width Fit.
- **Rating** - Limit DVD playback according to rating by selecting the highest allowed rating level in the Parental Control setting. A password is required to adjust the rating level, and the default password is "0000". To change the password, press Set Password. The unit will prompt you to enter the existing password, then the new password.

Time

- **Time** - To adjust hours or minutes press the desired field and enter the correct number using the on-screen keypad. Press AM or PM to select between them.
- **Mode** - Select between 12-hour and 24-hour clock formats.

Tuner

- **Region** - Select between USA and Europe frequency spacing.
- **Tune Type** - Select between Seek and Manual tuning. Seek tuning will seek the next or previous strong station when the tuning buttons ( or ) are pressed. In manual tuning mode, pressing the manual tuning buttons ( or ) will increase or decrease the frequency one step at a time.

General Operation

Setup Menu



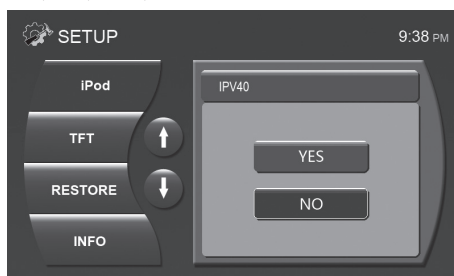
Calibrate - Press **YES** to calibrate the touchscreen. Press the center of the + as indicated on the screen to calibrate the touchscreen.

System

- **Camera** - Choose between **Normal** and **Mirror** settings for the rear camera images.
- **Beep** - Select **On** to hear an audible beep each time a button is pressed on the unit or touchscreen. Select **Off** to disable the audible beep.

Security - Select **On** to enable the anti-theft features or **Off** to disable them. A password is required to adjust the security settings, and the default password is "0000". To change the password, press Set Password. The unit will prompt you to enter the existing password, then the new password.

Gain - Manually adjust the gain from each of the following sources: Disc/SD/USB, iPod, Tuner, AV1 and AV2.



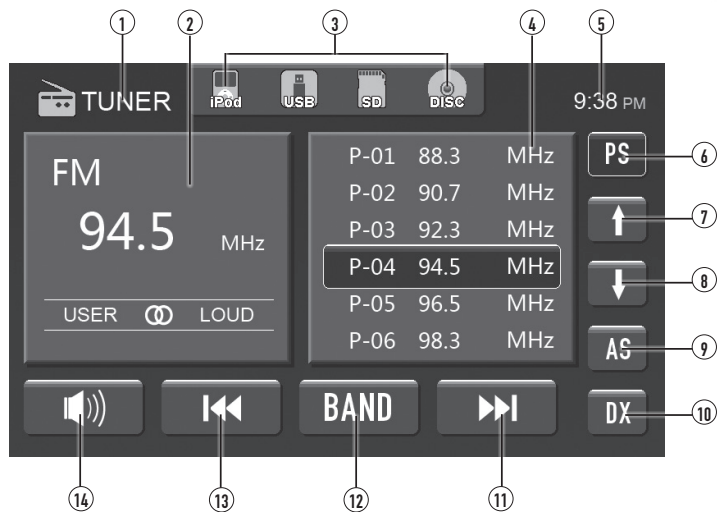
iPod - Select **Yes** to enable iPod video/photo playback through use of the optional IPV40 cable (sold separately). The IPV40 video output connects to the AV2 video input. See page 6 for details. Select **No** to disable the IPV40 video connection.

TFT - Select one of three TFT Screen Auto Open options. **OFF** will require manual opening of the TFT screen using **OPEN/ANGLE**. **ON** sets the unit to automatically open the TFT screen when powered on. **MANUAL** will require manual opening and closing of the TFT screen.

Restore - Select **Yes** to restore the unit to default settings.

Info - Displays current software version information.

AM/FM Tuner Operation



Tuner Operation	Select the Tuner icon from the Main Menu screen or the top icon display, or press MODE until Tuner is selected.
Current Mode Indicator ①	Displays current mode of operation. Press to return to the Main Menu screen.
Information Display ②	Displays current frequency, along with additional tuning information.
Additional Mode Icons ③	Press any mode icon to switch instantly to that mode of operation.
Preset Station Display ④	Displays the first six preset stations stored in memory. Use the arrow keys to scroll up and down the entire list. Press any preset station to play it instantly. Up to 18 FM and 18 AM stations can be stored in memory. Preset stations can also be accessed by entering the desired number (1-18) with the remote control.
Clock Indicator ⑤	Displays the current time.
Preset Scan ⑥	Press to scan all preset stations and listen to the first 10 seconds of each. Press again to stop scanning and listen to the station.
Scroll Up ⑦	Press to scroll up to the previous page in the preset station display list.
Scroll Down ⑧	Press to scroll down to the next page in the preset station display list.



AM/FM Tuner Operation

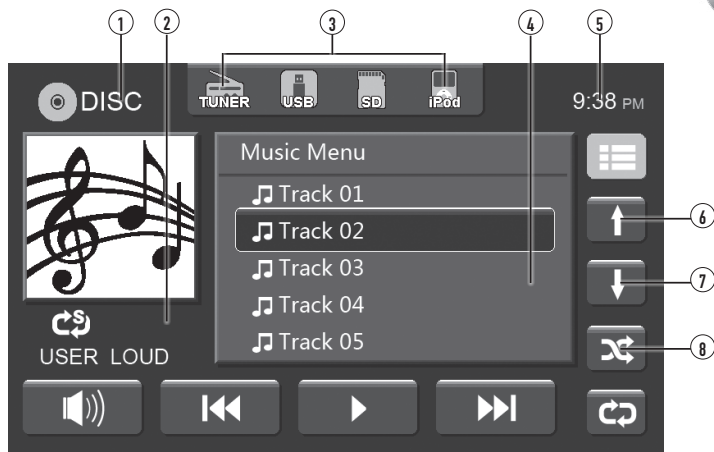
- | | |
|----------------------------------|---|
| Automatically Store ⑨ | Press to automatically find and store the strongest stations as presets.

Note: To manually save preset stations, tune to the desired station, then press and hold the desired preset number in the preset station display. The stored preset station will appear next to the preset number when saved. |
| Local / Distance Tuning ⑩ | Press to choose between Local (LOC) or Distance (DX) tuning options. The local option tunes to nearby radio stations with sufficiently strong signals for good reception. In areas where reception is poor, switching to distance tuning enables the unit to tune in to more distant stations. Distance tuning is the default tuning mode. |
| Tune Frequency Up ⑪ | Press to tune radio to a higher frequency. This function can also be performed by pressing the corresponding key on the remote control.

Note: Refer to page 11 for instructions on selecting either Seek or Manual tuning. Seek tuning will seek the next strong station when the Tune Frequency Up button (▶▶) is pressed. In manual tuning mode, pressing this button (▶▶) will increase the frequency one step at a time. |
| Band ⑫ | Press to toggle between AM and FM frequency bands. |
| Tune Frequency Down ⑬ | Press to tune radio to a lower frequency. This function can also be performed by pressing the corresponding key on the remote control.

Note: Refer to page 11 for instructions on selecting either Seek or Manual tuning. Seek tuning will seek the previous strong station when the Tune Frequency Down button (◀◀) is pressed. In manual tuning mode, pressing this button (◀◀) will decrease the frequency one step at a time. |
| Audio Setup ⑭ | Press to enter audio setup mode (see page 10 for details). |

CD Operation



CD Operation

Insert disc into the slot, and playback will begin automatically. If a disc has previously been inserted and the unit has been operating in another mode, resume disc playback by selecting the DISC icon from the Main Menu screen or top icon display, or pressing **MODE** until DISC is selected.

Current Mode Indicator ①

Displays current mode of operation. Press to return to the Main Menu screen.

Information Display ②

Displays current information about audio settings.

Additional Mode Icons ③

Press any mode icon to switch instantly to that mode of operation.

CD Track List ④

Displays the first five tracks on the CD. Use the arrow keys to scroll up and down the entire list, or press any track number to play it instantly. Elapsed time of current track will be displayed when playback begins.

Clock Indicator ⑤

Displays the current time.

Scroll Up ⑥

Press to scroll up to the previous page in the track playlist.

Scroll Down ⑦

Press to scroll down to the next page in the track playlist.

Random ⑧

Press to play all tracks on the CD in random order. Press again to cancel random playback.



CD Operation



- | | |
|-------------------------|---|
| Repeat ⑨ | Press to repeat current track. Press again to cancel the repeat function. |
| Next Track ⑩ | Press to advance to the next track. |
| Play / Pause ⑪ | Press to pause CD. Press again to resume CD playback. |
| Previous Track ⑫ | Press to go back to the previous track. |
| Audio Setup ⑬ | Press to enter audio setup mode (see page 10 for details). |
| Display Toggle ⑭ | Press to toggle between track playlist and current track information. |
| Stop | Press ■ on the remote control to temporarily stop playback. Press play to resume playback from the current position. Press ■ a second time to fully stop playback. Press play to begin playback from the beginning of the disc. |
| Fast Forward | Press ►► on the remote control to fast forward CD playback. Each touch changes speed from 2x to 4x to 8x to 16x then back to regular playback. |
| Fast Reverse | Press ◀◀ on the remote control to fast reverse CD playback. Each touch changes speed from 2x to 4x to 8x to 16x then back to regular playback. |

Note: Fast forward and fast reverse features can also be accessed using the touchscreen. When the current track information is displayed, drag the elapsed time indicator forward or backward to the desired point of playback.

MP3/WMA/JPG Operation



MP3/WMA/JPG Playback from Disc, USB Device or SD Card

To play MP3, WMA and JPG files from a disc, USB device or SD card. Insert disc, connect USB device or insert SD card, and playback will begin automatically. To return to disc, USB or SD card playback from another mode of operation, select the DISC, USB or SD icon from the Main Menu screen or top icon display, or press **MODE** until DISC, USB or SD is selected.

- **Using a USB Device** - Connect a USB device to the black USB input connector on the back of the unit.
- **Using an SD Card** - Insert SD card into the SD slot on the front of the unit. When inserting an SD card, the label should face up.

Note: It is not possible to view JPG files on the in-dash monitor while the vehicle is moving. This is a safety feature to prevent driver distraction. The JPG image viewer function will only operate when vehicle is in Park and the parking brake is engaged as described on page 26.

Current Mode Indicator ①

Displays current mode of operation. Press to return to the Main Menu screen.

Information Display ②

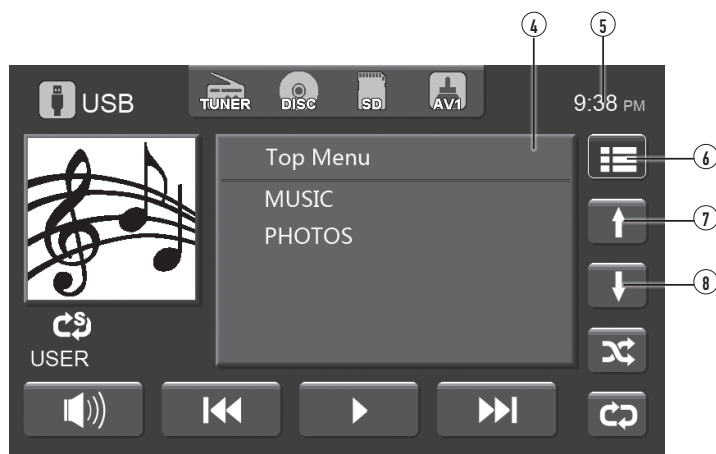
Displays current information about audio settings.

Additional Mode Icons ③

Press any mode icon to switch instantly to that mode of operation.



MP3/WMA/JPG Operation



Play List / Top Menu ④

Displays five folders, tracks or image files on the disc, USB device or SD card. Use the arrow keys to scroll up and down the list. Press any folder, track or image to access it instantly, or select a folder to view tracks or images in that folder. Elapsed time of current track will be displayed when playback begins.

Music / Photo Menu

Press the music note to select between the Music Menu and current track information. Press Music Menu to display the Top Menu and select MUSIC or PHOTOS. The current track information will be displayed after 5 seconds of no activity.

Clock Indicator ⑤

Displays the current time.

Track/Folder Selection ⑥

Press to select between page navigation and folder navigation for the Scroll Up and Scroll Down arrow buttons. This function is not available when the current track information is displayed.

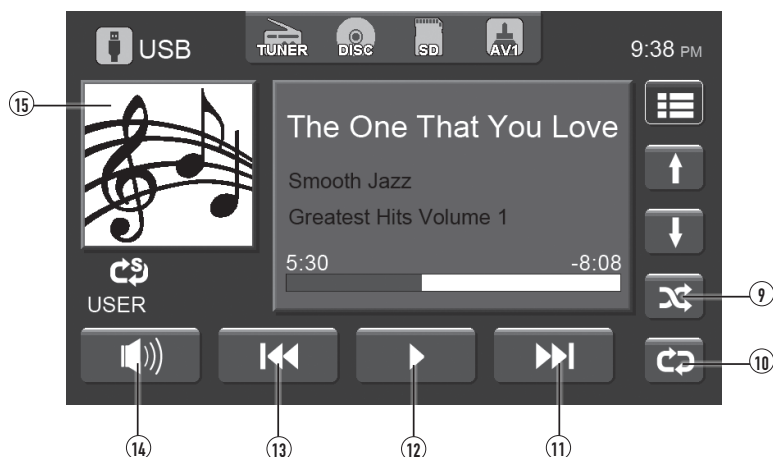
Page/Folder Up ⑦

Press to scroll up to the previous page. To select the previous folder, press the Track/Folder Selection button and use the Scroll Up button to select the desired folder. A folder icon will appear next to the up arrow.

Page / Folder Down ⑧



Press to scroll down to the next page. To select the next folder, press the Track/Folder Selection button and use the Scroll Down button to select the desired folder. A folder icon will appear next to the down arrow.

MP3/WMA/JPG Operation



Random ⑨ Press to play all tracks on the disc, USB device or SD card (in the current folder) in random order. Press again to cancel random playback.

Repeat ⑩ Press to step through the following repeat options:

- **Repeat Single**  - Repeat current track.
- **Repeat Folder**  - Repeat all tracks in current folder.

Press again to cancel the repeat function.



Next Track ⑪ Press to advance to the next track.

Play / Pause ⑫ Press to pause playback. Press again to resume playback.

Previous Track ⑬ Press to go back to the previous track.

Audio Setup ⑭ Press to enter audio setup mode (see page 10 for details).

Playlist / Menu Selection ⑮ Press to toggle between Music / Photo Menu, track playlist and current track information.

Stop Press  on the remote control to temporarily stop playback. Press play to resume playback from the current position. Press  a second time to fully stop playback. Press play to begin playback from the beginning.



MP3/WMA/JPG Operation

Fast Forward

Press **▶▶** on the remote control to fast forward playback. Each touch changes speed from 2x to 4x to 8x to 16x then back to regular playback.

Fast Reverse

Press **◀◀** on the remote control to fast reverse playback. Each touch changes speed from 2x to 4x to 8x to 16x then back to regular playback.

Note: Fast forward and fast reverse features can also be accessed using the touch screen to drag the elapsed time indicator forward or backward to the desired point of playback. The elapsed time indicator appears under the track information during playback.



Viewing JPG Images

When viewing JPG images, Press **Area E** to display on-screen JPG controls.

Rotate Counterclockwise ①

Press **↶** to rotate image counterclockwise.

Stop ②

Press **■** to stop the slideshow and return to the Photo Menu.

Play / Pause ③

Press **⏸** to pause or resume the slideshow.

Rotate Clockwise ④

Press **↷** to rotate image counterclockwise.

Thumbnail View

Press **TITLE** on the remote to display a thumbnail image of all JPG images in the current folder. Use the arrow buttons on the remote to select the desired image and press **OK** on the remote to display it.

Media Compatibility - USB/SD Card



File Type			WMA	MP3
File System	FAT	FAT 12	X	X
		FAT 16/FAT 32	✓	✓
File Extension	.mp3/.MP3/.Mp3/.mP3		X	✓
	.wma/.WMA		✓	X
	.rpm/.m4a		X	X
MPEG Format	MPEG 1		X	✓
	MPEG 2		X	✓
	MPEG 2.5		X	✓
Sampling Frequency	MPEG 1		X	32/44.1/48kHz
	MPEG 2		X	12/16/22.05/24kHz
	MPEG 2.5		X	8/11.025/12kHz
	WMA		32/44.1/48kHz	X
Bitrate	MPEG 1		X	32 ~ 320kbps
	MPEG 2		X	8 ~ 160kbps
	MPEG 2.5		X	8 ~ 160kbps
	WMA		32 ~ 192kbps	X
Other Information	Directory Depth		Unlimited	Unlimited
	File Name Length		32 bytes	32 bytes
	Total File Number		2000 files	2000 files
	Total Folder Number		200 folders	200 folders
	File Number via Folder		2000 files	2000 files
	MP3 ID3 TAG	ver.1.x	X	✓
		ver.2.x	X	✓
		Title, Artist, Album	X	✓
	WMA TAG	Title, Artist	✓	X

Notes:

- For USB mode, it is not possible to view JPG files on the in-dash monitor while the vehicle is moving. This is a safety feature to prevent driver distraction.
- The JPG image viewer function will only operate when vehicle is in park and the parking brake is engaged as described on page 26.
- Due to ongoing technological advancement, some USB flash drives and/or SD cards may be incompatible with this unit.



Media Compatibility - CD/DVD

File Type				WMA	MP3
File System	ISO9660	Level 1, Level 2		✓	✓
		Level 3		X	X
	ISO9660 Extension	JOLIET	Playback	✓	✓
			Filename	32 bytes	32 bytes
	Other Extensions	ROMEO	Playback	X	X
			Filename	X	X
		Apple ISO		X	X
File Extension	.mp3/.MP3/.Mp3/.mP3			X	✓
	.wma/.WMA			✓	X
	.rmp/.m4a			X	X
MPEG Format	MPEG 1			X	✓
	MPEG 2			X	✓
	MPEG 2.5			X	✓
Sampling Frequency	MPEG 1			X	32/44.1/48kHz
	MPEG 2			X	12/16/22.05/24kHz
	MPEG 2.5			X	8/11.025/12kHz
	WMA			32/44.1/48kHz	X
Bitrate	MPEG 1			X	32 ~ 320kbps
	MPEG 2			X	8 ~ 160kbps
	MPEG 2.5			X	8 ~ 160kbps
	WMA			32 ~ 192kbps	X
Other Information	Directory Depth			Unlimited	Unlimited
	File Name Length			32 bytes	32 bytes
	Total File Number			2000 files	2000 files
	Total Folder Number			200 folders	200 folders
	File Number via Folder			2000 files	2000 files
	MP3 ID3 TAG	ver.1.x		X	✓
		ver.2.x		X	✓
		Title, Artist, Album		X	✓
	WMA TAG	Title, Artist		✓	X

Notes:

- It is not possible to view JPG files on the in-dash monitor while the vehicle is moving. This is a safety feature to prevent driver distraction.
- The JPG image viewer function will only operate when vehicle is in park and the parking brake is engaged as described on page 26.

Media Compatibility



Media Compatibility

The following types of discs are compatible:

- CD-DA, CD-ROM (ISO), CD-R, CD-RW
- DVD Video, DVD+R/RW, DVD-R/RW

The following types of discs/files are not compatible:

- WMA files that are protected by DRM (Digital Rights Management)
- WMA lossless format
- Discs recorded with Track At Once or packet writing
- MP3 PRO format, MP3 playlists
- RMP format
- WAV format
- WMV format
- DivX, Xvid format
- AVI format
- MPG, MPEG-4 format
- AAC, protected AAC, M4A format

Some recordable DVD's and CD's may be incompatible with this unit, depending on media type and recording method.

Playback Order

MP3/WMA playback sequence begins in the root folder of the disc, USB flash drive or SD card. Any empty folders or folders that do not include MP3/WMA/JPG files are skipped.

Compatible Recording Formats

ISO9660 standards:

- Maximum nested folder depth is 8 (including the root folder).
- Valid characters for folder/file names are letters A-Z (all caps), numbers 0-9, and "_" (underscore). Some characters may not be displayed correctly, depending on the character type.
- This device can play back discs in Joliet and other standards that conform to ISO9660. MP3/WMA written in the formats other than the above may not play and/or their file names or folder names may not be displayed properly.

Additional MP3/WMA Information

An internal buffer provides ESP (Electronic Skip Protection) to virtually eliminate skipping.

When playing a disc recorded with regular audio files (CD-DA or .WAV) and MP3/WMA files, the unit will play the MP3/WMA files only.

Notes

Some files may not play or be displayed correctly, depending on sampling rates and bit rates.

For best results, use the following settings when ripping MP3 files:
128kbps or higher constant bit rate
44.1kHz or higher sampling frequency

For best results, use the following settings when ripping WMA files:
64kbps or higher constant bit rate
44.1kHz or higher sampling frequency

WARNING

Upon installation of this Monitor/DVD player ("unit") into a vehicle, the driver of the vehicle must not operate this unit by watching videos or playing video games while driving. Failure to follow this instruction could lead to driver distraction which could result in serious injury or death to the vehicle's occupants or persons outside the vehicle and/or property damage.

Several states prohibit the installation of monitors/DVD players if the screen is visible from the driver's seat. If you reside in a jurisdiction which has enacted such a law, this unit must not be installed so that the screen is visible from the driver's seat. When installing this unit in the front console/dashboard, the unit must be positioned so that it is facing the front passenger seat only. Failure to follow this instruction could lead to driver distraction which could result in serious injury or death to the vehicle's occupants or persons outside the vehicle and/or property damage.

This unit is designed so that it may be operated only when the vehicle is in "Park" and the parking brake is fully engaged. To this end, this unit includes a parking brake lock-out feature which prohibits the unit from operating if the vehicle is not in "Park" and/or the parking brake is not fully engaged. When installing this unit, the installer must connect the parking brake detect wire ("Yellow-Blue Lead") to the parking brake mechanism in order to make the parking brake lock-out feature operable. DO NOT simply ground the parking brake detect wire to a metal portion of the vehicle. Failure to properly install the parking brake lock-out feature could lead to driver distraction which could result in serious injury or death to the driver's occupants or persons outside the vehicle and/or property damage.

Once the parking brake lock-out feature is installed, the owner/user must not attempt to disrupt/neutralize the parking brake lock-out feature by (a) partially engaging the parking brake and/or (b) purchasing/using any device or unit designed to send necessary brake signals to the unit. Failure to follow these instructions could lead to driver distraction which could result in serious injury or death to the driver's occupants or persons outside the vehicle and/or property damage.

When operating this unit, keep the unit's volume level low enough so that the vehicle's occupants can hear traffic-related sounds such as police and emergency vehicles. Failure to follow this instruction could lead to driver distraction which could result in serious injury or death to the vehicle's occupants or persons outside the vehicle and/or property damage.

DVD Setup - Region Management



DVD Region Management

Some DVD discs can be played only in certain playback modes according to the intentions of the software. As the XDVD3101 plays discs according to their intentions, some functions may not work as intended. Please be sure to read the instructions provided with each disc. This player has been designed to play back DVD software that has been encoded for specific region areas. It cannot play back DVD software encoded for other region areas than the region areas for which it has been designed.




The XDVD3101 will play discs labeled "Region 1" or "All".




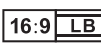

DVD region codes:

- 1 - USA, Canada
- 2 - Japan, Europe, South Africa, Middle East
- 3 - Rep. of Korea, Taiwan, Hong Kong, Parts of Southeast Asia
- 4 - Australia, New Zealand, Mexico, South America
- 5 - Eastern Europe, Russia, India, Africa
- 6 - China



DVD Disc Symbols

Symbol	12cm Disc Properties	Max Play Time
	Single side single layer (DVD-5) Single side double layer (DVD-9) Double side single layer (DVD-10) Double side double layer (DVD-18)	(MPEG 2 Method) 133 minutes 242 minutes 266 minutes 464 minutes
	Single side single layer (VCD)	(MPEG 1 Method) 74 minutes
	Single side single layer	74 minutes

Symbol	Meaning
	Number of voice languages recorded. The number inside the icon indicates the number languages on the disc (maximum of 8).
	Number of subtitle languages available on the disc (maximum of 32).
	Number of angles provided (maximum of 9).
	Aspect ratios available. "LB" stands for Letter Box and "PS" stands for Pan/Scan. In the example on the left, the 16:9 video can be converted to Letter Box video.
	Indicates the region code where the disc can be played. <ul style="list-style-type: none"> • Region 1: USA, Canada, East Pacific Ocean Islands • Region 2: Japan, Western Europe, Northern Europe, Egypt, South Africa, Middle East • Region 3: Taiwan, Hong Kong, South Korea, Thailand, Indonesia, South-East Asia • Region 4: Australia, New Zealand, Middle and South America, South Pacific Ocean Islands/ Oceania • Region 5: Russia, Mongolia, India, Middle Asia, Eastern Europe, North Korea, North Africa, North-West Asia

Notes:

Some DVD discs can be played only in certain playback modes according to the intentions of the software. As the XDVD3101 plays discs according to their intentions, some functions may not work as intended. Please be sure to read the instructions provided with each disc.



DVD Setup - Parking Brake Initialization

SAFETY WARNING

- The video display of the in-dash unit will not operate while the vehicle is moving. This is a safety feature to prevent driver distraction. In-dash video functions will only operate when vehicle is in Park and the **PARKING BRAKE** is engaged. It is illegal in most states for the driver to view video while the vehicle is in motion. Refer to local laws in your area.
- The vehicle must be in park and the parking brake applied to view video on the in-dash monitor.
- As a safety feature, **!!Safety Warning!!** blue screen will show on the display when the vehicle's parking brake is not engaged. Video display on the in-dash monitor isn't allowed until the **PARKING BRAKE** is engaged. Connect the yellow/blue **PARKING BRAKE** wire to the brake switch circuit as described on page 6. **Note:** DVD and AUX AV audio can be heard while the vehicle is in motion without engaging the parking brake.

Watching Video

Follow these two initialization procedures carefully to allow video playback on the XDVD3101 in-dash monitor:

Parking Brake Initialization

There are two ways to initiate the **PARKING BRAKE** sequence.

If vehicle is moving:

- 1) Stop vehicle, put in Park, make sure **PARKING BRAKE** is off/released.
- 2) Depress **PARKING BRAKE** for 1 second.
- 3) Release **PARKING BRAKE** for 1 second.
- 4) Depress **PARKING BRAKE** permanently.

If vehicle is already parked and the PARKING BRAKE is already applied:

- 1) Keep vehicle in Park, **PARKING BRAKE** should be on.
- 2) Release **PARKING BRAKE** for 1 second.
- 3) Depress **PARKING BRAKE** for 1 second.
- 4) Release **PARKING BRAKE** for 1 second.
- 5) Depress **PARKING BRAKE** permanently.

Note: The parking brake transition time must be less than 2 seconds between depress and release. This procedure must be repeated anytime the unit or vehicle ignition is turned off.

DVD Operation




Inserting a Disc

Insert disc into the slot, and playback will begin automatically. Sub-menus may have to be pressed to access the DVD content. Read the directions of your specific DVD disc for other features.

Note

If parental controls are activated and the disc inserted is not authorized, a 4-digit password must be entered to continue playback. See DVD Rating instructions on page 11 for details.

Ejecting the Disc

Press  to eject the disc.

Touchscreen Controls

In DVD mode, six hidden touchscreen controls enable various functions during playback. A DVD disc must be inserted to access these functions and features.

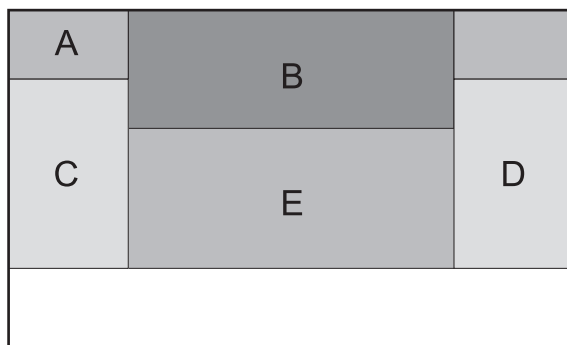
Area A - Displays **MAIN** menu.

Area B - Displays **DVD** disc information, including current time, title, chapter audio, subtitle languages and angle.

Area C - Selects **PREVIOUS** chapter.

Area D - Selects **NEXT** chapter.

Area E - Displays the **DVD** transport controls.

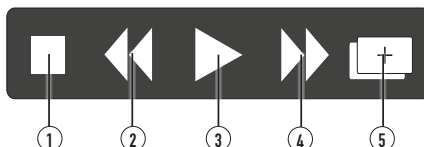


Note: During DVD playback, use the on-screen DVD transport controls to perform additional functions as outlined on page 28.

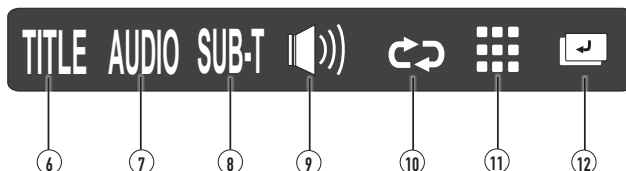


DVD Operation

DVD Transport Controls



- Stop** ① Press once to stop the chapter at current point of playback. Press again to fully stop the disc.
- Fast Reverse** ② Press to step through the following fast reverse speeds: 2x, 4x, 8x or 16x. Press again to resume normal play.
- Pause** ③ Press to pause DVD playback. Press again to resume.
- Fast Forward** ④ Press to step through the following fast forward speeds: 2x, 4x, 8x or 16x. Press again to resume normal play.
- Additional Controls** ⑤ Press to access additional controls. The following submenu will appear:



- Title Menu** ⑥ Press to access the Title menu.
- Audio Language** ⑦ Press to change language of the audio playback.
- Subtitles** ⑧ Press to display subtitles.
- Audio Setup Mode** ⑨ Press to access audio setup mode.
- Repeat** ⑩ Press to activate repeat functions: repeat chapter, repeat title and repeat off.
- DVD Search** ⑪ Press to access search mode and enable searching by title, chapter or time (see page 29 for details).
- Previous Menu** ⑫ Press to return to previous page of transport control menu.

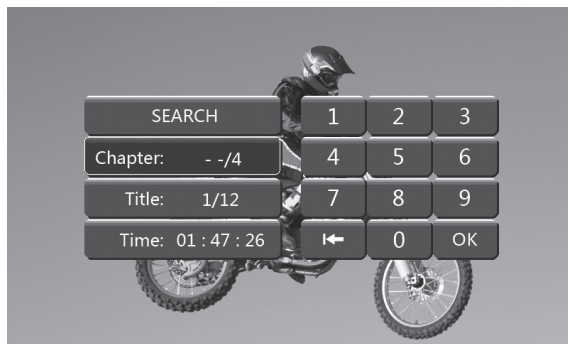
Note: Stop, Fast Reverse, Pause, Fast Forward, Title, Audio, Subtitle and Repeat functions can also be accessed by pressing the corresponding button on the remote control. The Search function is accessed by pressing **SRCH** on the remote control. In addition, several DVD features - Zoom, Angle and Root Menu - can only be accessed from the remote control (see page 30 for more information).

DVD Operation



Searching a DVD

Use the transport controls to bring up the Search keypad, which allows search by time, title or chapter. The Chapter search window appears as the default. Alternately, access the Search keypad using the **SRCH** button on the remote control (see below).



Once the Search window is open, press the corresponding button to search by Chapter, Title or Time, then use the keypad to enter the desired title, chapter or time. Press **OK** to begin playback at desired Chapter, Title or Time.

For example, to skip to 1 hour, 47 minutes and 26 seconds into the DVD, select Time, then touch **01, 47, 26**, then press **OK**.

From the remote control:

Press **SRCH** to access the Search window. Use the arrows to highlight the Chapter, Title or Time, then use the numeric keypad to enter the appropriate information. Press **OK** to begin playback at desired Chapter, Title or Time.

Note: Some DVD discs can be played only in certain playback modes according to the intentions of the software. As the XDVD3101 plays discs according to their intentions, some functions may not work as intended. Please be sure to read the instructions provided with each disc.



DVD Operation

Remote Control	<p>Many DVD features and functions can be accessed using the remote control.</p> <p>Stop, Fast Reverse, Pause, Fast Forward, Title, Audio, Subtitle and Repeat functions, are accessed by pressing the button on the remote control that corresponds to the same button on the DVD touch screen controls (see page 28 for more information).</p> <p>The Search function is accessed by pressing SRCH on the remote control.</p>
Zoom	<p>Press ZOOM on the remote control to enlarge the video image using the following zoom options: 1, 2, 3 and OFF. When the zoom is activated, the arrows buttons can be used to pan the video image up, down, left and right.</p>
Angle	<p>Some DVDs contain scenes that have been shot from different angles. For DVDs recorded with multiple angles, press ANGLE on the remote control to toggle available angles.</p>
Root Menu	<p>Press ROOT on the remote control to return to the DVD's root menu.</p>
Notes:	<p>Not all DVD's have sub-titles and when they do, some will only have 1 language. Therefore this function may be disabled or limited. The sub-title can only be changed while the DVD is playing.</p> <p>Not all DVD's have multiple languages, therefore this function may be disabled or limited. The audio stream can only be changed while the DVD is playing.</p> <p>On some DVD's the TITLE and ROOT functions may be reversed.</p>

Operation of iPod



Operation of iPod

Connect an iPod device to the XDVD3101 to enable audio and video playback. A standard iPod cable (sold separately) can be used to connect all iPod devices for audio playback. To view video and photos from an iPod device, the Dual IPV40 cable (sold separately) is required.

Current Mode Indicator ① Displays current mode of operation. Press to return to the Main Menu screen.

Information Display ② Displays current information about audio settings.

Additional Mode Icons ③ Press any mode icon to switch instantly to that mode of operation.

Current Song Information ④ Displays current song information.

Clock Indicator ⑤ Displays the current time.

Random ⑥ Press once to random play all songs within the list. Press twice to random play all songs on the current album. Press again to cancel the random function.

Repeat ⑦ Press to repeat current song. Press again to cancel the repeat function.

Next Song ⑧ Press to advance to the next song.

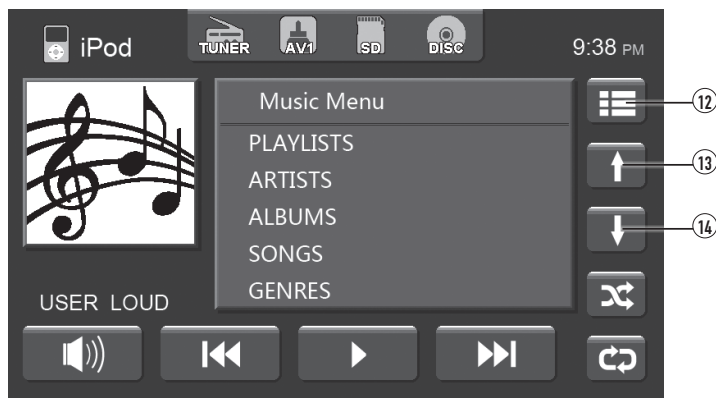
Play / Pause ⑨ Press to pause playback. Press again to resume.

Previous Song ⑩ Press to go back to the previous song.

Audio Setup ⑪ Press to enter audio setup mode (see page 10 for details).



Operation of iPod



Menu ⑫

Press to select the menu. Depending on the iPod device, select between Music, Video and Photo files. Navigate using the Scroll Up and Scroll Down arrow buttons and touch the desired item to select it. For example, select Artists group and the display will change to a list of available artists. Select an artist from this list to hear some or all songs from that artist. Press Menu again to go back to a previous menu. For example, when browsing songs from a particular artist in Artist group mode, press Menu to return to the list of all available artists. The current track information will be displayed after 5 seconds of no activity.

Scroll Up ⑬

Press to scroll up to the previous page in the list.

Scroll Down ⑭

Press to scroll down to the next page in the list.

Notes:

The scroll functions are not available when the current track information is displayed. Press and hold the scroll buttons to quickly advance up or down when searching. The rate of advancement will increase the longer the button is pressed.

Fast Forward

Press ►► on the remote control to fast forward playback.

Fast Reverse

Press ◀◀ on the remote control to fast reverse playback.

Note: Fast forward and fast reverse features can also be accessed using the touch screen to drag the elapsed time indicator forward or backward to the desired point of playback. The elapsed time indicator appears under the track information during playback.

Operation of iPod - Videos



Playing Video Files

To view video files from an iPod device, the IPV40 cable (sold separately) is required. Connect the IPV40 cable as shown on page 6 and make sure to set the IPV40 Cable option to "On" in the Setup menu as described on page 12.

Make sure TV Out is enabled on your device (consult iPod owner's manual for details).

Press the menu button, then press VIDEOS to access the video files. Select the desired video file for playback.

In video mode, four hidden touchscreen controls enable various functions during playback.

Area A - Displays **MAIN** menu.

Area B - Selects between video playback and the iPod video menu.

Area C - Selects **PREVIOUS** chapter.

Area D - Selects **NEXT** chapter.

Note: Not all movies support the Previous and Next chapter feature.

It is not possible to view videos on the in-dash monitor while the vehicle is moving. This is a safety feature to prevent driver distraction. Video functions will only operate when vehicle is in Park and the parking brake is engaged as described on page 26.



Operation of iPod - Photos



Viewing Photos

To view photos from an iPod device, the IPV40 cable (sold separately) is required. Connect the IPV40 cable as shown on page 6 and make sure to set the IPV40 Cable option to "On" in the Setup menu as described on page 12.

Make sure TV Out is enabled on your device (consult iPod owner's manual for details).

Press the menu button, then press PHOTOS to access the photo viewer mode. From your iPod device, select the desired photo and begin the slide show.

In photo viewer mode, two hidden touchscreen controls are available (refer to page 33 for more details):

Area A - Displays **MAIN** menu.

Area B - Selects between photo viewer and the iPod photo menu.

Note: It is not possible to view photos on the in-dash monitor while the vehicle is moving. This is a safety feature to prevent driver distraction. Photo viewing functions will only operate when vehicle is in Park and the parking brake is engaged as described on page 26.

Auxiliary Inputs - AV1 & AV2



Using AV1 Input

Connect an optional audio/video source into the 3.5mm (front panel) input.

Select AV1 from the Main Menu to listen to audio.

Engage parking brake as described on page 26 to watch video.

Adjust volume on the external audio source as needed (if connected to the headphone output of the device).

Using AV2 Input

Connect an optional audio/video source to the Auxiliary Input 2 (Red/White/Yellow RCA connectors). Refer to page 6 for details.

Select AV2 from the Main Menu to listen to audio.

Engage parking brake as described on page 22 to watch video.

Note: The external video output is not active when using the AV1/AV2 inputs or when viewing video from an iPod device.

Rear Camera Operation - (Optional)



Using Rear Camera

Connect an optional rear camera to the Camera Input (Black RCA connector). Refer to page 6 for details.

The camera image can be reversed (if needed) in the Main Setup Menu. Refer to page 12 for details.

Manual selection - Touch CAMERA icon from the Main Menu to select camera mode. Touch the top left area on the screen to exit camera mode.

Auto Selection

The unit will automatically select camera mode when connected to the reverse lamp circuitry. Refer to page 6 for details.

Note: The external video output is not active when using the rear camera input.

Limited One Year Warranty

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

Dual Electronics Corp. warrants this product to the original purchaser to be free from defects in material and workmanship for a period of one year from the date of the original purchase.

Dual Electronics Corp. agrees, at our option, during the warranty period, to repair any defect in material or workmanship or to furnish an equal new, renewed or comparable product (whichever is deemed necessary) in exchange without charges, subject to verification of the defect or malfunction and proof of the date of purchase. Subsequent replacement products are warranted for the balance of the original warranty period.

Who is covered? This warranty is extended to the original retail purchaser for products purchased from an authorized Dual dealer and used in the U.S.A.

What is covered? This warranty covers all defects in material and workmanship in this product. The following are not covered: software, installation/removal costs, damage resulting from accident, misuse, abuse, neglect, product modification, improper installation, incorrect line voltage, unauthorized repair or failure to follow instructions supplied with the product, or damage occurring during return shipment of the product. Specific license conditions and copyright notices for the software can be found via www.dualav.com.

What to do?

1. Before you call for service, check the troubleshooting guide in your owner's manual. A slight adjustment of any custom controls may save you a service call.
2. If you require service during the warranty period, you must carefully pack the product (preferably in the original package) and ship it by prepaid transportation with a copy of the original receipt from the retailer to an authorized service center.
3. Please describe your problem in writing and include your name, a return UPS shipping address (P.O. Box not acceptable), and a daytime phone number with your shipment.
4. For more information and for the location of the nearest authorized service center please contact us by one of the following methods:

- Call us toll-free at 1-866-382-5476
- E-mail us at cs@dualav.com

Exclusion of Certain Damages: This warranty is exclusive and in lieu of any and all other warranties, expressed or implied, including without limitation the implied warranties of merchantability and fitness for a particular purpose and any obligation, liability, right, claim or remedy in contract or tort, whether or not arising from the company's negligence, actual or imputed. No person or representative is authorized to assume for the company any other liability in connection with the sale of this product. In no event shall the company be liable for indirect, incidental or consequential damages.



Specifications

Disc	Frequency response: 20Hz-20kHz Channel separation @ 1kHz: >80dB D/A converter: 24 Bit
FM Tuner	Tuning range: 87.5MHz-107.9MHz Usable sensitivity: 10dBf 50dB quieting sensitivity: 20dBf Stereo separation @ 1kHz: 38dB Frequency response: 30Hz-13kHz
AM Tuner	Tuning range: 530kHz-1710kHz Usable sensitivity: 24uV Frequency response: 30Hz-2.3kHz
USB	Compatibility: High Speed USB 2.0 Output: 5VDC, 500mA USB Class: Mass storage class
SD	Compatibility: SD memory card & SDHC memory card
Monitor	Panel size: 7.0" diagonal measurement View angle (up/down/left/right): 50/70/70/70 Resolution: 800 (H) x 480 (V) Brightness (cd/m ²): 250 Contrast ratio: 500:1 Pixels: 1,152,000
General	Speaker output impedance: 4 ohms Line output voltage: 2 volts Line output impedance: 200 ohms Chassis dimensions: 7" x 7" x 2" (W x D x H) Design and specifications subject to change without notice.



CEA-2006 Power Standard Specifications
(reference: 14.4VDC +/- 0.2V, 20Hz~20kHz)

Power Output: 16 Watts RMS x 4 channels at 4 ohms and $\leq 1\%$ THD+N
Signal to Noise Ratio: 80dBA (reference: 1 watt into 4 ohms)

Troubleshooting

General		
Problem	Cause	Action
Unit will not turn on (no power)	Yellow wire not connected or incorrect voltage	Check connections for proper voltage (11~16VDC)
	Red wire not connected or incorrect voltage	
	Black wire not connected	Check connection to ground
	Fuse blown	Replace fuse(s)
Unit has power (but no sound)	Speaker wires not connected	Check connections at speakers
	One or more speaker wires touching each other or touching chassis ground	Insulate all bare speaker wires from each other and chassis ground
Unit blows fuse(s)	Yellow or red wire touching chassis ground	Check for pinched wire
	Speaker wires touching chassis ground	Check for pinched wire
	Incorrect fuse rating	Use fuses with correct rating
Unit has audio (but no video)	Parking brake safety circuit not connected	Check connections at parking brake
	Parking brake not applied	Apply parking brake as described on page 26
No video display (when in reverse)	Reverse circuit not connected Vehicle is not in reverse	Check connections at reverse lamp Select reverse gear
DVD does not start playback	Physical defect in media	Check media for scratches
	Wrong region	Use discs labeled "Region 1" or "All" only
IR remote does not work	Dead battery	Replace battery
Excessive skipping	Unit is not mounted correctly	Check mounting sleeve
	Physical defect in media	Check media for scratches
Disc Region Incorrect appears on display	Region code error	Use discs labeled "Region 1" or "All" only

For Your Records

Please keep your original sales receipt and be prepared to provide this receipt in the event you require service, as your original receipt is considered the best proof of purchase and indicates the date you purchased your Dual product.

Dealer Name _____

Dealer Phone _____

Purchase Date _____

Register Your Product

Register your product online at www.dualav.com



Dual Electronics Corp.
Toll Free: 1-866-382-5476

www.dualav.com

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